36 Lecture - PHY301

Important Mcqs

Which of the following is the configuration of a full wave rectifier?

a) Center-tap

b) Bridge

c) Half-wave

d) None of the above

Answer: b) Bridge

How many diodes are used in a full wave rectifier?

a) 1

b) 2

c) 3

d) 4

Answer: d) 4

What is the purpose of the filter capacitor in a full wave rectifier circuit?

a) To increase the ripple in the output

b) To reduce the ripple in the output

c) To decrease the output voltage

d) None of the above

Answer: b) To reduce the ripple in the output

What is the ripple frequency in a full wave rectifier?

a) Half the frequency of the AC input

b) Equal to the frequency of the AC input

c) Double the frequency of the AC input

d) None of the above

Answer: c) Double the frequency of the AC input

What is the efficiency of a full wave rectifier compared to that of a half wave rectifier?

a) Higher

b) Lower

c) Same

d) Cannot be determined

Answer: a) Higher

What is the output voltage of a full wave rectifier compared to that of a half wave rectifier?

a) Higher

b) Lower

c) Same

d) Cannot be determined

Answer: a) Higher

What is the purpose of the center-tapped transformer in a full wave rectifier circuit?

a) To provide DC voltage

b) To reduce the ripple in the output

c) To double the output voltage

d) None of the above

Answer: d) None of the above

What is the peak inverse voltage rating required for the diodes in a full wave rectifier circuit?

a) Equal to the peak voltage of the AC input

b) Twice the peak voltage of the AC input

c) Half the peak voltage of the AC input

d) None of the above

Answer: b) Twice the peak voltage of the AC input

What is the type of output waveform produced by a full wave rectifier?

a) Sine wave

b) Square wave

c) Triangular wave

d) None of the above

Answer: d) None of the above (It is a pulsating DC waveform)

What is the range of the output voltage of a full wave rectifier circuit?

a) 0 to the peak voltage of the AC input

b) 0 to twice the peak voltage of the AC input

c) Equal to the RMS voltage of the AC input

d) None of the above

Answer: b) 0 to twice the peak voltage of the AC input